

**Sprint**

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June 25, 1999

**VIA HAND DELIVERY**

Magalie Roman Salas, Secretary  
Federal Communications Commission  
The Portals  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

**RECEIVED**  
**JUN 25 1999**  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**Re: Ex Parte Presentation: *Further Notice of Proposed Rulemaking*, The  
Communications Assistance for Law Enforcement Act, CC Docket  
No. 97-213**

Dear Ms. Salas:

Sprint Spectrum L.P. d/b/a Sprint PCS ("Sprint") hereby files an original and one copy of a notification of an *ex parte* contact in CC Docket 97-213.

Mr. Jonathan Chambers, Mr. Joseph Assenzo, Mr. Charles LaCroix, Mr. Ron Carter and Mr. Roger Sherman of Sprint met with the following Federal Communications Commission staff members to discuss the Communications Assistance for Law Enforcement Act "Punch List" items and capacity constraints:

Office of Commissioner Susan Ness: Mr. Dan Connors.

Office of Commissioner Gloria Tristani: Ms. Karen Gulick.

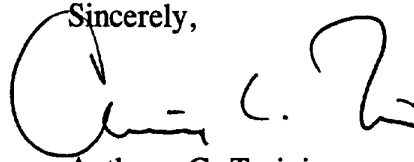
Office of Engineering Technology: Ms. Geraldine Matise, Ms. Rebecca Dorck, and Mr. Rodney Small (with Mr. Thomas Wasilewski of the Wireless Telecommunications Bureau in attendance).

Sprint outlined its CALEA solution (the Sprint Integrated Network Surveillance System) and discussed the problems posed by some of the punch list items. In addition, Sprint suggested that the Commission urge the Department of Justice to balance capacity and capability needs.

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List A B C D E

A copy of Sprint's presentation is attached. Please contact the undersigned with any questions

Sincerely,

A handwritten signature in black ink, appearing to read 'Anthony C. Traini', with a large, stylized initial 'A'.

Anthony C. Traini  
Legal Analyst

**Attachments**

cc: Mr. Dan Connors  
Ms. Karen Gulick  
Ms. Geraldine Matise  
Ms. Rebecca Dorck  
Mr. Rodney Small

## **The CALEA Punch List Controversy**

While creating a “safe harbor” for carriers adopting industry standard (J-STD-025), Congress made clear that “[c]ompliance with industry standard is voluntary, not compulsory.” “Carriers can adopt other solutions for complying with the capability requirements.” (H.R. 103-827 at 27)

SPCS has developed its own CALEA solution: the Sprint PCS Integrated Network Surveillance (SINS) system. Sprint PCS has supported law enforcement (LEA) interceptions since service launch in November 1996.

SINS is a centralized, open, multi-platform system using “off the shelf” technologies. It can be used with any switch type, and by using “off the shelf” components, SINS can be enhanced, as new technologies become available. SINS is cost-effective solution for LEAs —an important issue especially for state/local LEAs.

Sprint PCS’s network is engineered with capacity to meet a local market’s actual and estimated need for intercepts based on the historical number of wiretaps. Sprint PCS’s capacity for call detail interceptions is not an issue, but port capacity for content interceptions is likely to be a major issue given the sizable levels of capacity specified by the Justice Department.

Sprint PCS can provide many of the punch list items, but a few involve information that is not reasonably available.

CALEA imposes two requirements before call detail information must be provided: the information must fall within the call-identifying information definition, and the information must be “reasonably available to the carrier”.

Reasonable availability must be examined in two contexts: 1) Is information reasonably available in the carrier’s network? And, 2) Can information be reasonably extracted and delivered to LEAs?

FCC should adopt a practical definition of “reasonably available:” Can call detail information be made available with reasonable effort?

Application of “reasonably available” standard must be applied on a carrier-by-carrier basis. The FCC correctly concluded that CPE functions are not reasonably available because “no network signal would be generated.” (Further NPRM at ¶ 86.) The FCC should also reaffirm that carriers need not provide interception capability when they do not offer same capability to their own customers.

Finally, the FCC should encourage Justice Department to balance capacity and capability needs.

## **Punch List — Other ... Cont'd**

**Surveillance Status (#6):** LEAs would receive periodically verification that a call content interception has been established and is still functioning. FCC tentatively concluded that CALEA does not require such automated verification messages

- ◆ SPCS tests with LEAs to confirm that “tap” has been activated
- ◆ While SPCS does not transmit automated verification messages, it does conduct additional manual tests upon LEA request
- ◆ LEAs can verifying functioning of call content channel by reviewing call detail messages

**FCC should reaffirm that CALEA does not require automated verification messages**

## **Punch List — Other ... Cont'd**

**Continuity check tone (#7):** LEAs would receive a “C tone” over the call content channel until subject originates or receives a call. FCC tentatively concluded that CALEA does not require such C tones

- ◆ C-tones provided today through LEA JSI cards installed in SPCS switch sites

**FCC should reaffirm that CALEA does not require carriers to provide C tone; LEAs historically have provided this functionality**

## Summary

- ◆ FCC should encourage Justice Department to balance capacity and capability needs
- ◆ FCC should adopt a practical definition of “reasonably available:” Can call detail information be made available with reasonable effort?
- ◆ Reasonable availability must be examined in two contexts:
  - Is underlying information available in a carrier’s network?
  - If so, can information be reasonably extracted for delivery to LEAs?

**FCC should not make any generic determinations of reasonable availability  
because what may be reasonably available to one carrier  
may not be reasonably available to another carrier**

*See Further NPRM at ¶ 26 (“[C]arriers use a variety of system architectures and different types of equipment, leading us to believe that reasonable availability is also likely to vary from carrier to carrier.”)*

*See FBI Comments, Dkt 97-213 at 18-19 (12-14-98) (“[P]articular call-identifying information may prove to be ‘reasonably available’ to one carrier and not ‘reasonably available’ to another. . . . [A]s a practical matter, it would not be feasible for the Commission to determine the availability of particular call-identifying information separately with respect to each platform and carrier.”)*

## **Punch List — Other ... Cont'd**

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**Sprint PCS**

**The CALEA Punch List Controversy and Capacity Constraints**

Presentation to the Federal Communications Commission

Jonathan Chambers

Joe Assenzo

Charles LaCroix

Ron Carter

Roger Sherman

June 1999

## **CALEA Capability Overview**

- ◆ Congress made clear that CALEA “leaves it to each carrier to decide how to comply” (H.R. 103-827 at 23)
- ◆ While creating a “safe harbor” for carriers adopting industry standard (J-STD-025), Congress further made clear that “[c]ompliance with industry standard is voluntary, not compulsory”
  - “Carriers can adopt other solutions for complying with the capability requirements” (H.R. 103-827 at 27)
  - “[C]arriers are free to develop CALEA solutions in any manner they choose” (FCC Further NPRM at ¶ 32)

**SPCS has developed its own CALEA solution:  
the Sprint Integrated Network Surveillance (SINS) system**

## **Sprint PCS Surveillance System History**

- ◆ Number of interceptions — Title III taps, pen register, trap/trace — has grown as network and customer base has expanded:

### New Interception Orders Received

March 1998	28
March 1999	92

- ◆ Interceptions are small part of SPCS assistance. Most LEA needs supported by responding to subpoenas for customer records:

	<u>No. Subpoenas</u>	<u>No. MINs (phones)</u>
1997	1,234	2,290
1998	12,034	30,655
1Q99 only	5,926	16,063

**Sprint PCS has supported law enforcement (LEA) interceptions  
since service launch in November 1996**

## **CALEA Capacity Overview**

- ◆ “[CALEA] requires the government to pay all capacity costs from the date of enactment. . .  
Until the Attorney General agrees to reimburse a carrier for such modifications, the carrier shall be considered to be in compliance with the capacity notices.”
- ◆ The Justice Department published law enforcement’s capacity requirements for PCS and other carriers in March 1998
- ◆ Carriers unable to meet capacity requirements required to file Carrier Statement within 180 days after capacity requirements published

**Sprint PCS has no obligation to expand its current interception port capacity until the Justice Department agrees to reimburse Sprint PCS**

## **CALEA Capacity Constraints**

- ◆ Sprint PCS network engineered with capacity to meet market's actual and estimated intercepts based on historical number of wiretaps
- ◆ Sprint PCS' capacity for call detail interceptions is not an issue, but port capacity for content interceptions is a major issue given the sizable levels of capacity specified by the Justice Department
- ◆ Sprint PCS may not be able to meet all LEA interception requests because the desired port capacity does not exist
- ◆ Capacity constraints affect state and local LEAs which are dependent upon the federal government to fund the desired capacity
- ◆ Sprint PCS stands ready to install additional port capacity, if reimbursed
- ◆ Capacity and capability reimbursement are paid out of the same fund – \$500 million limit

**The FCC should encourage the Justice Department to balance  
capacity and capability needs**

## **Sprint Integrated Network Surveillance (SINS) System Overview**

- ◆ Centralized, open, multi-platform system using “off the shelf” technologies
  - SINS can be used with any switch type and by using “off the shelf” components, can be enhanced as new technologies become available
  - Call content interceptions activated centrally, but implemented locally
  - Centralized call-identifying (call detail) interception collection and delivery
- ◆ SINS is cost-effective solution for LEAs — important issue for state/local LEAs
  - LEAs require fewer leased lines and do not require special collection boxes (each costing \$100,000 or more)
  - SINS can be accessed from any PC using most communications software programs using SPCS-provided 800 lines
  - LEAs can access call detail information in real time or review historical records
  - LEAs can download call detail information to spreadsheets to sort or load into call analysis software programs

**SINS is proven system (successfully used in surveillance for over two years)  
and a work in progress (e.g., Internet and GUI interface being added  
to simplify LEA access)**

## **The Nine Punch Generally**

**The Punch List items can be grouped into three categories:**

- ◆ Call content:
  - Enhanced conference call (#1)
- ◆ Call detail:
  - Party hold, join, drop (#2)
  - Subject initiated dialing (#3)
  - Signaling notification messages (#4)
  - Feature status (# 8)
  - Dialed digit extraction (# 9)
- ◆ Other:
  - Timing information (#5)
  - Surveillance status (#6)
  - Continuity check tone (#7)

**Congress “expects industry, law enforcement and the FCC to *narrowly* interpret [CALEA’s] requirements” (H.R. 103-827 at 23)(emphasis added)**









## **Punch List — Call Content**

**Enhanced Conference Call (#1):** Ability to monitor subject-initiated conference calls even after the subject drops off the call

- ◆ SPCS not impacted by the outcome of this item
- ◆ SPCS offers its customers ability to initiate three-way calls, and LEAs can tap such calls (so long as LEAs order sufficient capacity)
- ◆ However, SPCS does not offer service where the conference bridge is maintained once the mobile subject drops off the call: with SPCS, all calls drop as soon as subject leaves the call

**FCC should reaffirm that carriers need not provide interception capability when they do not offer same capability to their own customers**

(Further NPRM at ¶ 78; *see also* CALEA § 103(b))

## Punch List — Call Detail Overview

- ◆ CALEA imposes two requirements before call detail information must be provided:
  - Information must fall within call-identifying information definition (CALEA § 102(2)); and
  - Information must be “reasonably available to the carrier” (CALEA § 103(a)(2))
- ◆ Proposed definition of reasonable availability: Can information be made available with reasonable effort?
- ◆ Reasonable availability must be examined in two contexts:
  - Is information reasonably available in the carrier’s network?  
FCC correctly concluded that CPE functions are not reasonably available because “no network signal would be generated” (Further NPRM at ¶ 86)
  - If so, can information be reasonably extracted and delivered to LEAs?
- ◆ By definition, application of “reasonably available” standard must be applied on a carrier-by-carrier basis

**Congress has declared that “if such information is not reasonably available, the carrier does not have to modify its system to make it available” (H.R. 103-827 at 22)**

## **Punch List — Call Detail**

### **Party hold, join, drop on conference calls (#2):**

- ◆ Party join information: All legs of call are identified
- ◆ Party drop: LEAs given disconnect message when call ends
- ◆ SPCS does not collect party hold information on conference calls—capability not offered and no business reason for doing so

**Party hold is not offered**

## **Punch List — Call Detail ... Cont'd**

**Subject-initiated dialing (#3):** Subject uses features such as call forwarding, call waiting, and three-way calling

- ◆ SPCS provides this capability today: LEAs given feature codes using (including over-the-air activation) plus dialed digits of every leg added or changed

**While SPCS provides subject-initiated dialing, such information may not be reasonably available to other carriers**

## **Punch List — Call Detail ... Cont'd**

**Signaling Notification Messages (#4):** LEAs receive a message when call directed to subject's voice mail or when subject is unable to complete call attempt because called party line is busy or ringing

- ◆ Among other things, LEAs notified when:
  - Call to subject is redirected to subject's voice mail
  - Call to subject is not answered
  - Subject's call attempt is not answered
- ◆ SPCS can manually retrieve message waiting indicator (MWI), and identify the number of unread messages
- ◆ SPCS can offer interceptions of voice mail and text messages

**Identifying message waiting indicators and whether a call is not answered because it was busy or not answered involves information that cannot be reasonably extracted**



## **Punch List — Call Detail ... Cont'd**

**Feature Status (#8):** LEAs notified when subject changes his subscription-based calling services (*e.g.* call waiting, call return)

- ◆ SPCS provides this call identifying information today if changes are made from the handset: LEAs receive handset-initiated feature codes
- ◆ SPCS can provide record if subject changes features using SPCS business office
- ◆ Feature status information is stored in SPCS' external HLRs - HLR vendor is hopeful it can provide software "triggers" so all changes in feature status can be delivered automatically to LEAs

**It appears that in future all changes in feature status  
will be reasonably available to SPCS**

## **Punch List — Call Detail ... Cont'd**

**Dialed Digit Extraction (#9):** LEAs receive “post-cut-through” digits on call data channel. This is a new capability LEAs have not received in past

- ◆ As FCC notes, from perspective of SPCS network, “post-cut-through” digits appear to be call content, not call-identifying information (Further NPRM at ¶ 128)
- ◆ LEAs can receive “post-cut-through” digits the same way they received them in past over analog networks: obtain call content interception order or submit billing record subpoena to IXC

**Can provide IF content, but if “post-cut-through” digits are call-identifying information, that information is not reasonably available to SPCS**

## **Punch List — Other**

**Timing Information (#5):** This item has two components: (1) carrier provides time stamp with each call detail message; and (2) carrier delivers message to LEAs within a defined time, with FBI asking that messages be delivered within three seconds

- ◆ SPCS provides time stamp with each message, thereby enabling LEAs to correlate call detail information with call content
- ◆ SPCS cannot consistently deliver call detail messages within three seconds of call event
  - Extra time is consumed because of centralized collection/delivery system — arrangement that benefits LEAs
  - Timing of delivery dependent on network congestion at time of call event
  - SPCS currently delivers messages between four-to-eight seconds after call event — except for one switch type, where messages are not available until the call ends
  - SPCS examining ways to reduce delivery times

**CALEA § 103(a)(2) requires delivery of call detail “immediately after transmission of a wire or electronic communication (or at such later time as may be acceptable to the government).” Delivery of call detail messages within four-to-eight seconds meets this requirement**